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Vacuum die casting process involves opening the evacuated die cavity only after complete filling of the casting chamber with molten metal
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 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 19914830	A1	20001005	DE 1014830	A	19990401	200061 B
WO 200059658	A1	20001012	WO 2000CH93	A	20000221	200061
AU 200025312	A	20001023	AU 200025312	A	20000221	200107
EP 1165274	A1	20020102	EP 2000903480	A	20000221	200209
			WO 2000CH93	A	20000221	

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Patent Details:

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AU 200025312 A B22D-017/14 Based on patent WO 200059658

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Abstract (Basic): DE 19914830 A1

Abstract (Basic):

NOVELTY - In the vacuum die casting process the evacuated die cavity (5) is opened only after complete filling of the casting chamber (6, 6') with molten metal.

DETAILED DESCRIPTION - A vacuum die casting process comprises controlled evacuation of the die cavity (5), the casting chamber (6, 6') and the die feeder channel by means of a reduced pressure generator and a shut-off valve (16), the evacuated die cavity (5) only being opened after the closed casting chamber (6, 6') has been completely filled with molten metal.

An INDEPENDENT CLAIM is also included for a die casting die, especially for use in the above process.

USE - For vacuum die casting of metal or alloy parts.

ADVANTAGE - The die evacuation and filling operations are

independent of one another, thus allowing more time for die cavity evacuation so that higher quality cast parts are produced.

DESCRIPTION OF DRAWING(S) - The drawing shows a simplified schematic view of a vacuum die casting die for use in the process of the invention.

Die (1)

Die cavity (5)

Casting chamber (6, 6')

Casting piston (7)

Evacuation channel (15)

Vacuum shut-off valve (16)

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